ELECTRONIC COMMERCE/ ELECTRONIC

DATA INTERCHANGE (EC/EDI) OVERVIEW

FOR

STRATEGIC SYSTEMS PROGRAM OFFICE

OBJECTIVES

- At the completion of this presentation you will know:
  - What EC/EDI is
  - What EDI transaction sets and documents are, and how they support DoD procurement
  - Why the Government is changing procurement systems and processes
  - How FASA initiated EC within the Government, and its impact on procurement
  - What FACNET is
  - How SPS utilizes EDI
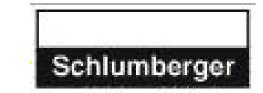 - About efforts to improve the Government's EDI capabilities

WHAT IS EC/EDI

Electronic Commerce is the paperless exchange of business information using EDI, E-Mail, Computer Bulletin Boards, FAX, Electronic Funds Transfer, & other similar technologies.

In its simplest form, Electronic Data Interchange (EDI) is the computer to computer exchange of standard business documents in electronic format between two organizations.

HISTORY OF EDI

- The concept and technology has been around industry for more than 20 years

- Recently EDI has caught the attention of the world business community

BASIC DEFINITIONS

- **Trading Partner** - The sending and/or receiving party involved in the exchange of EDI transmissions.

- **Value Added Network (VAN)** - A VAN is a third party network service provider. VANs add value to the EDI environment by allowing multiple computer types, modems, and transmission speeds to communicate through the VAN electronic mailbox.

- **Translator** - Software that is used to translate EDI data to a corporate proprietary format and vice versa.

- **Transaction Set** - The EDI term for a business document, such as a purchase order or invoice.

- **Standards** - The format and contents of business documents giving EDI linked computers the ability to speak the same language:
  - American National Standards Institute (ANSI)
  - Accredited Standards Committee (ASC)
  - X12 - Subcommittee for EDI

TYPICAL ANSI X12 TRANSACTION SETS

810 - Invoice

840 - Request for Quotation (RFQ) *

843 - Response to an RFQ *

838 - Trading Partner Profile

997 - Functional Acknowledgment

824 - Application Advice

836 - Procurement Notices *

850 - Purchase Order *

864 - Text Message

832 - Price/Sales Catalog

855 - PO Acknowledgment *

860 - PO Change *

865 - PO Change Acknowledgment

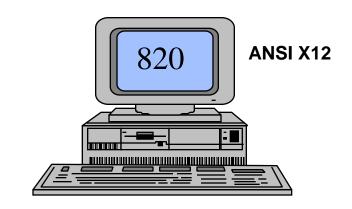869 - Order Status Inquiry

870 - Order Status report

820 - Payment Order/
Remittance Advice

823 - Lockbox

824 - Application Advice

828 - Preauthorized Debit

820 **ANSI X12**

* - Indicates transaction sets contracted for implementation with SPS.
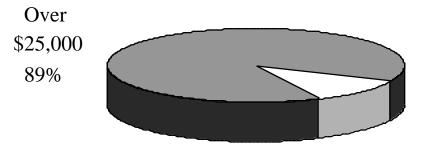
TRANSACTIONS BETWEEN COMPUTER APPLICATIONS OF DIFFERENT ORGANIZATIONS

Customer

↓

Buyer

Purchasing

Receiving

Financial

Request for Quote (840) →

Technical Specifications (841) →

Functional Acknowledgment (997) ←→

Response to RFQ (843) ←

Purchase Order (850) →

P.O. Acknowledgment (855) ←

Purchase Order Change (860) →

P.O. Change Acknowledgment (865) ←

Invoice (810)/Advance Ship Notice (856) ←

FRT Bill (210) ←

Receiving Advice (861) →

Payment Order/Remittance Advice (820)
Electronic Funds Transfer

Vendor

Sales

Order Entry

↓

Shipping

↓

Financial

Bank — *CTX* — **Bank**

FEDERAL GOVERNMENT PROCUREMENTS

n The Government spends $2,000,000,000,000 per year for goods and services (FY94 DoD share $112B)

n 89% of the dollars Washington spends goes toward purchases over $25,000

n 98 % of the Government's transactions are less than $25,000

Government Dollars Spent

Over $25,000 89%

Under $25,000 or 11%

Federal Purchase Transactions

Under $25,000 98%
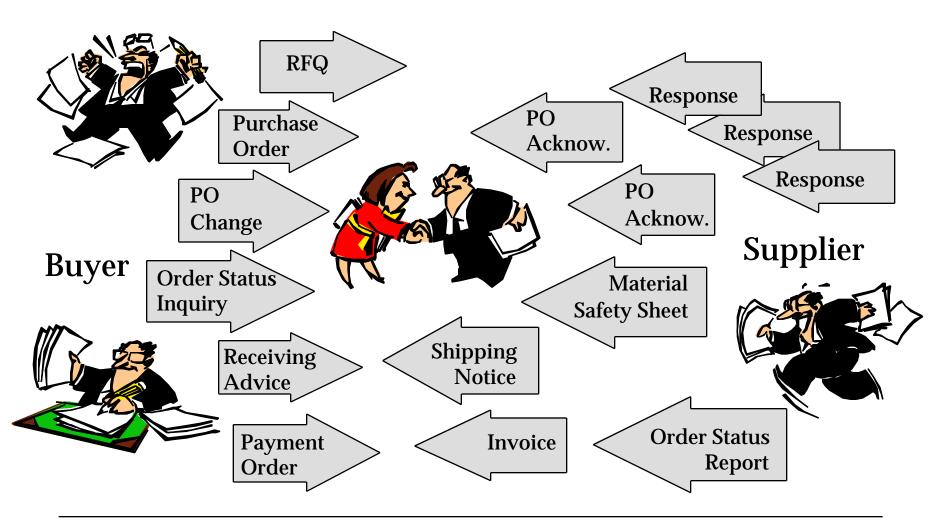
Over $25,000 89%

CURRENT BUYING PROCEDURES

From a Buyer's perspective:

n Very paper intensive

n Lots of regulations and certifications

n Administrative burden

n Mix of paper and EDI vendors

n Uncertainty in status of actions

CURRENT PROCUREMENT SYSTEM

Buyer

RFQ

Purchase Order

PO Change

Order Status Inquiry

Receiving Advice

Payment Order

PO Acknow.

PO Acknow.

Response

Response

Response

Material Safety Sheet

Shipping Notice

Invoice

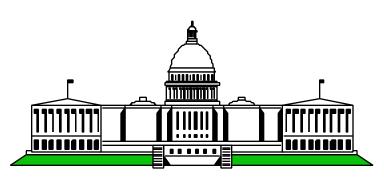Order Status Report

Supplier

EDI BENEFITS

Lower costs

Increased business with other private sector companies

n   Increased efficiency and effectiveness

n   Improvements in overall quality

n   Reduced inventory

n   Lower mailing costs

n   Reduced over time

n   Faster billing

n   Better information for management decisions

Greater Efficiency

FEDERAL ACQUISITION STREAMLINING ACT OF 1994 (FASA)

Streamline business processes & utilize EC technologies

- Reduce administrative costs
- Facilitate acquisition of commercial products
- Expand the use of small purchase procedures
- Move paper-based systems to EC
- Repeals or modifies more than 225 acquisition laws
- Improve the efficiency of the procurement process
- Uniform treatment of DoD and Civilian Agency procurements

EC EMPHASIS OF FASA

n Simplified Acquisition Threshold (SAT):

- Formerly "small purchases"
- Threshold = $100,000
- Buyers must send out RFQs via EDI to qualify for $100,000 SAT ceiling

n Micropurchases

n Federal Acquisition Computer Network (FACNET):

- EC/EDI connection
- Uses national and international data formats that serve to facilitate EDI
- Allows user access through any point of entry

MICROPURCHASES

Now...

☺ Purchases below $2,500

☺ Encourages credit card purchases

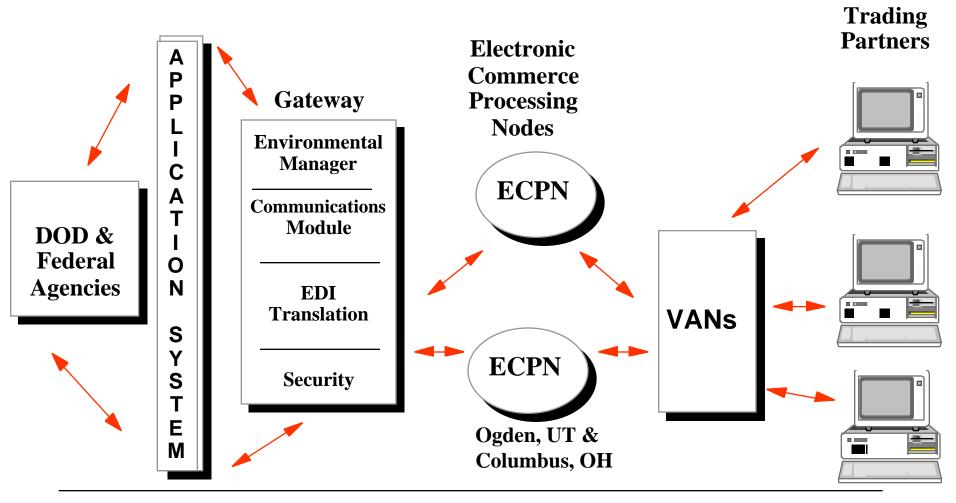☺ Agencies can offer Micropurchases via EDI *at their discretion*

Eliminates...

✂ Small business set asides

✂ "*Buy American*" Act requirements

✂ Open competition, if the price is "reasonable"

FACNET

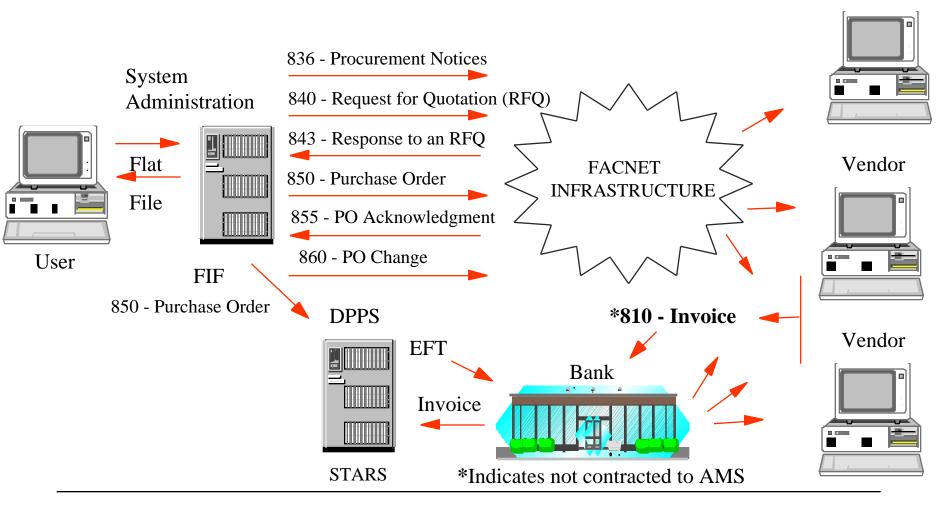A computer-based source of information readily accessible to Government and private sector users, including small businesses:

- Gateway - DoD agencies' data entry point:
    - Converts business data into ANSI X12 format
- Electronic Commerce Processing Nodes (ECPN):
    - Distribution Hub
- Value Added Network (VAN):
    - Supplier's interface with FACNET
    - Electronic mailbox for exchange transactions

FACNET INFRASTRUCTURE

DOD & Federal Agencies

APPLICATION SYSTEM

Gateway

Environmental Manager

Communications Module

EDI Translation

Security

Electronic Commerce Processing Nodes

ECPN

ECPN

Ogden, UT & Columbus, OH

VANs

Trading Partners

SPS TO "BE SYSTEM"

836 - Procurement Notices

840 - Request for Quotation (RFQ)

843 - Response to an RFQ

850 - Purchase Order

855 - PO Acknowledgment

860 - PO Change

System Administration

Flat File

User

FIF

850 - Purchase Order

DPPS

EFT

Invoice

STARS

FACNET INFRASTRUCTURE

Vendor

Vendor

Vendor

Vendor

*810 - Invoice

Bank

*Indicates not contracted to AMS

BEYOND FACNET

- n Proposed Bill "Federal Planning and Electronic Commerce Improvement Act of 1997":
  - ■ Modifies FASA of 1994
  - ■ Government must keep pace with evolving technologies
- n The key issue is to be able to transmit and store EDI information in a reliable and secure environment.
- n A USN initiative underway is a Internet-based system with direct on-line access that will augment existing EDI and EC in contracting systems.

RESOURCES

n Acquisition Reform:

   http://www.acq.osd.mil/ar/

n DoD Electronic Commerce Office:

   http://www.acq.osd.mil/ec/

n Navy Acquisition Reform:

   http://www.acq-ref.navy.mil/

n Navy SPS:

   http://www.abm.rda.hq.navy.mil/sps/

n SPS Program Management Office:

   http://www.sps.hq.dla.mil/

n AMS:

   http://pd2.amsinc.com/